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## FROM THE DIRECTOR'S OFFICE

Michael Anastasio

### September 11 has brought profound change to the Lab

Next week marks the second anniversary of the tragic events of September 11. Some of the emotion that filled that first year may be somewhat tempered now, but we remain not only a nation changed, but a Laboratory changed.

As I reflect on the profound changes that have occurred at our Laboratory over the past two years, I'm struck by many factors. I continue to be impressed by our employees who come to work each day with that "passion for mission." As always, we are resolute in our national security missions.

But the nation's sense of urgency, as well as our own, have changed. The sense of pride and the heightened importance we place on our duties have changed. As Secretary of Energy Spencer Abraham said during his visit last December: "The missions that drive this Laboratory each day have never been more important."

We are a national security laboratory, but the breadth and scope of that mission, and the means to accomplish it, have changed. Laboratory expertise and technology in forensic science, biodetection, environmental monitoring, computer simulation, threat assessment and counterterrorism, tapped in the immediate aftermath

See **DIRECTOR'S OFFICE**, page 7

### U.S. Senate committee hears DOE proposal for new policy on polygraphs

The U.S. Senate Committee on Energy and Natural Resources held a hearing Thursday on the Department of Energy's proposed policy on polygraphs. DOE Deputy Secretary Kyle McSillarow testified at the hearing, and was followed by Stephen Fienberg, chairman of the National Research Council's Committee to review the scientific evidence on the polygraph and principal author of the NAS study on polygraphs.

McSillarow presented his recommendations to the Secretary Spencer Abraham as the new policy that the DOE should adopt in response to the Notice of Proposed Rulemaking (NOPR) issued by the DOE on April 14. At the time of the NOPR release, the Secretary said that "it was appropriate at the present time to" retain the current system "in light of the current national security environment..."

See **POLYGRAPH**, page 3

## Examining 'Atoms for Peace' 50 years later

By Don Johnston  
NEWSLINE STAFF WRITER

The Center for Global Security Research (CGSR)

concluded a series of workshops in Washington D.C. Thursday looking at the world 50 years after President Dwight Eisenhower's visionary "Atoms for Peace" speech.

Under the rubric, "Atoms for Peace After 50 Years: The New Challenges and Opportunities," experts in



nonproliferation, civilian applications and cross-cutting issues of materials, governance and public confidence in a series of three workshops. Previous workshops were held also in Livermore, Gotemba, Japan,

defense, civilian nuclear energy, science and policy from around the world examined issues of defense, deterrence,

See **CGSR**, page 8

## Talks focus on collaborations with UC Davis

By Linda Lucchetti  
NEWSLINE STAFF WRITER

It was a full day of strategic planning, presentations by researchers, and tours of facilities when the Laboratory's University Relations Program (URP) recently hosted a visit by 40 UC Davis faculty and staff to explore possible future collaborations between the two organizations.

This visit was a result of previous meetings between the University Relations Program management team, UC Davis Vice Chancellor for Research, Barry Klein, and several UC Davis associate deans. LLNL is entering into a new phase of interactions with UC Davis to plan the

See **FOCUS GROUP**, page 8



JACQUELINE MCBRIDE/NEWSLINE

UC Davis researchers look on as the Lab's John Vogel, second from right, discusses biological research projects conducted at the Laboratory's Center for Accelerator Mass Spectrometry.

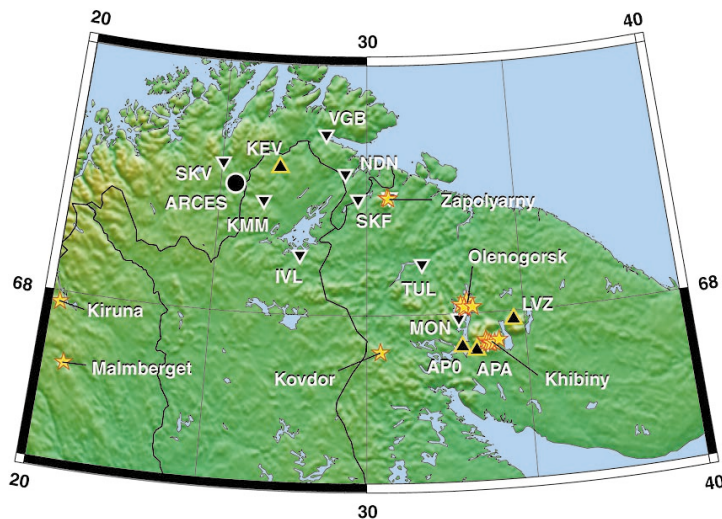
## Seismologists study mining blasts in the Baltics

By Anne M. Stark  
NEWSLINE STAFF WRITER

In the northern region of Norway lies a seismic monitor sensitive enough to detect mining blasts containing as little as a few tons of explosive in neighboring Russia and Sweden.

Originally set up to ensure countries were adhering to the Comprehensive Test Ban Treaty of 1996, the seismic station, named ARCES, in addition to at least a dozen other temporary stations is now being used by Lab scientists to screen out commercial mining explosions so that monitoring stations can decipher whether an earthquake or nuclear explosion

See **EARTHQUAKES**, page 8



Stars indicate mines while circles, triangles and inverted triangles indicate seismic stations set up to detect mining blasts in Sweden and Russia as part of a Laboratory research project.



**Nobel laureate on  
DNA sequencing**

— Page 3



**High schooler's  
computing exploit**

— Page 5





## LAB COMMUNITY NEWS

### Weekly Calendar

#### Technical Meeting Calendar, page 4

Saturday  
**6**

UTel has scheduled **power outages** for today in Bldgs. 131, 252, 253, 254 and Trailers 2512, 2529, 2625, 2626, 2627, 2629, 2633 and 2679 from 7 a.m. to 3 p.m.

Air conditioning, heating and elevators will also be affected. For more information, contact Mark Cardoza, 3-0490.

Monday  
**8**

The Lab's **quarterly blood drive** will be held in Trailer 4181 today through Thursday. Donors are encouraged to schedule an appointment in advance at <http://llesa.llnl.gov/>, and clicking on the words "Blood Drive," located to the left side of the window. Website are listed here. Individuals without Internet access can schedule an appointment by calling the American Red Cross at 1-800-448-3543. The company sponsor code is LLNL.

Wednesday  
**10**

The **Laboratory Women's Association's summer social-membership** drive takes place today at the LLESA pool/picnic area, 11:30 a.m.-1 p.m. Luncheon choices include barbecued chicken or portabella mushroom sandwiches, potato salad, fresh fruit, cookies and a drink. The association is also putting out a call for '04 nominations for president, vice president, secretary and treasurer. Please send nominations to Christine Bell at [bell2@llnl.gov](mailto:bell2@llnl.gov). Voting will be held during the social.

...  
The LLESA **Healthy Lifestyles Networking Group** affiliates with Weight Watchers at Work program, and will resume meetings today. They meet in Bldg 571, room 2301, from 11:30 a.m.-12:30 p.m. For more information call Marissa Mertes, 2-4842 or Marianne Ammendolia, 2-0901.

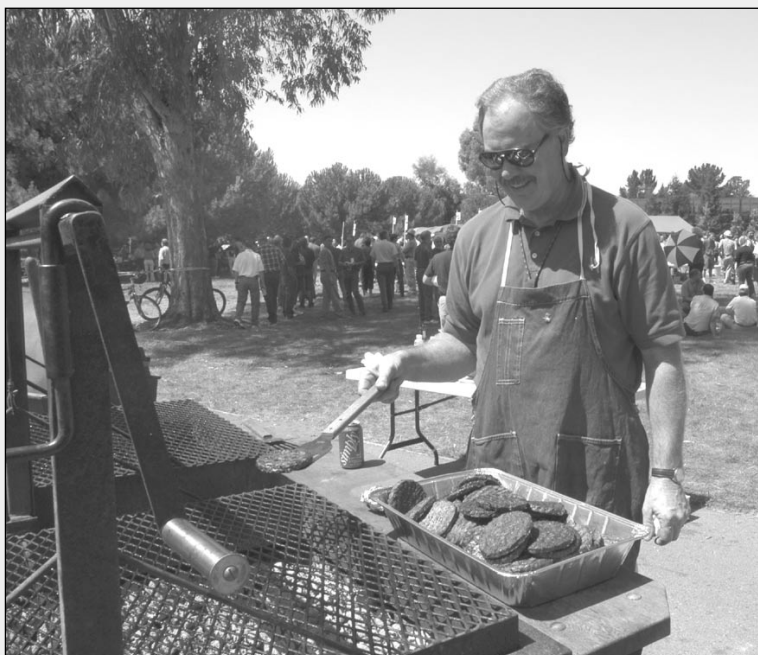
UP  
&  
COMING

The Amigos Unidos Hispanic Networking Group presents a kickoff celebration of **Hispanic Heritage Month** at 11:30 a.m. Sept. 15 in the picnic/pool area. Lunch plate s including a drink are available for \$6.50 per plate. Tickets may be purchased the day of the event. Pre-sale chicken or pork tamales are available for \$7.50 per half dozen and \$14 per dozen by calling Jessica Barraza, 2-6750, Michael Martin, 3-6580, Alicia Salmeron, 3-0969 or Irene Ortega, 2-6350.

...  
The 14th annual **LLESA Vintage Vehicle Show** is Thursday, Sept. 18. Show classifications include: Vintage (pre '55), Classic (pre '65), Factory Muscle, Street Rods, Sports Car, Motorcycles, Kit Cars, Under Construction, and Other.

...  
The upcoming **Leadership Lecture Series** will feature Jeffrey Pfeffer talking about "The Paths to Influence and the Responsibility of Power" at 9:30 a.m. Sept. 24 in the Bldg. 123 auditorium. Pre-enrollment is required. For more information, contact Ginny Von der Schmidt, 2-3131, or Susan Flowers, 2-5951.

### Engineering the perfect picnic



BOB HIRSCHFELD/PUBLIC AFFAIRS

Gary Power, a superintendent in Engineering's New Technologies Division, cooks up another batch of burgers for Wednesday's Engineering Picnic, on the lawn between Bldgs. 481 and 482. The event was sponsored by the Engineering Directorate and organized by participants of Engineering's Technical and Administrative Leadership Program to thank its 2,200 employees for their work during the past year. The BBQ staff ran through 720 burgers, 680 Polish dogs, 148 hot dogs, and 150 veggie burgers.

### RETIREES' CORNER

**John Stroud** (W Division, 1984) and his wife Hildy Pehrson have returned from a trip to Washington's Olympic Peninsula to visit Hildy's daughter and family. They took a side trip in the North Cascades, stopping in Cashmere, Wash. to visit Jack and Joey Davis (W Division). Another side trip was to Friday Harbor, San Juan Island to visit Nate and Helen Benedict (W Division), followed by a sight-seeing trip up Vancouver Island.

**Art Henry** (Beam Research, 1990) and his wife Betty celebrated their 50th wedding anniversary by taking their entire family: two sons, spouses and four grandchildren, to London, for two weeks in July. Art is a member of the local planning commission in Fallbrook, 50 miles north of San Diego, where they moved in 1991. They both are active in the local garden club, Friends of the Fallbrook Library, and play a lot of bridge.

Jan and **Harold Pfeifer** (Environmental Protection, 1993) recently (July) returned from a Baltic Sea cruise aboard the Holland America ms Noordam. Stops included Tallinn, Estonia; St. Petersburg, Russia (two days); Helsinki, Finland; Stockholm and Visby, Sweden; and Arhus and Copenhagen, Denmark. The shore excursions were excellent and the weather was great (no rain). The Great Palace (Peterhof) was magnificent.

**Gordon Longerbeam** (Engineering, 1996) loves the freedom of retirement but misses the intellectual stimulation (which he gets some of in other ways). His advice to those thinking of retire-

ment would be to not rush it — work is a very important part of life. Having said that, he is having a great time. He has more time for skiing, travel, grandkids, etc. He and his wife Ester just returned from Europe where they sailed around the British Isles and wound up in France. Their daughter met them in Paris for a few days (in the sweltering heat, but still fun) and she and Ester went on to Switzerland for a week of hiking — their annual mother-daughter trip.

The next retiree luncheon will be Wednesday, Sept. 17. Robert N. Shock will be the speaker and his talk is entitled "21st Century Energy Technologies." This is one luncheon you will not want to miss. To make reservations, go to the Retiree Organization Website: [www.llnlretirees.org](http://www.llnlretirees.org).

Ten retirees showed up at the LLESA office Wednesday, Aug. 27, to stuff approximately 2,700 envelopes. The Laboratory sends out the Retiree Association's annual mailing of membership applications, election of officers and dinner/dance forms to retirees living within a 50-mile radius of the Lab. It's interesting to note that there are more than 4,000 Lab retirees and approximately 2,700 live within a 50-miles radius of the Laboratory.

Please send any news or input (please include the date and department from which you retired) to Jane or Gus Olson. E-Mail: [AugustO@aol.com](mailto:AugustO@aol.com) or [JaneRubert@aol.com](mailto:JaneRubert@aol.com), call (925) 443-4349 or mail to 493 Joyce Street, Livermore, Calif. 94550.

### Week of Caring asking volunteers to help with community events

The Laboratory's HOME campaign members are continuing to recruit volunteers for community events benefiting senior citizens and families in crisis.

The kickoff project Saturday, Sept. 20, will be organizing and cleaning the Buenas Vidas Thrift Store, and performing building maintenance at the Buenas Vidas Youth Ranch. Both facilities are in Livermore.

If you are interested in volunteering for a future project; on Saturday Oct. 11, yard-work volunteers are needed at the Anthropos Counseling Center in Livermore. On Friday, Oct. 31, volunteers are needed to setup, serve and cleanup at the Pleasanton Senior Center during their Halloween Masquerade Ball.

For more information about the Laboratory's Week of Caring, or to volunteer for any of these events, contact Polly Malik [malik1@llnl.gov](mailto:malik1@llnl.gov) or Bridget Petrovic [petrovic1@llnl.gov](mailto:petrovic1@llnl.gov).

### Newsline

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#### Contacts:

Media & Communications manager: Lynda Seaver, 3-3103

Newsline editor: Don Johnston, 3-4902

Contributing writers: Bob Hirschfeld, 2-2379; David Schwoegler, 2-6900; Anne M. Stark, 2-9799; Stephen Wampler, 3-3107; Gordon Yano, 3-3117; Leslie Schwartz. For an extended list of Lab beats and contacts, see <http://www.llnl.gov/llnl/06news/NewsMedia/contact.html>

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Telephone: (925) 422-4599; Fax: (925) 422-9291

e-mail: [newsline@llnl.gov](mailto:newsline@llnl.gov) or [newsonline@llnl.gov](mailto:newsonline@llnl.gov)

Web site: <http://www.llnl.gov/PAO/>

## AROUND THE LAB



# Detecting specific targeted sequences in DNA

Alan J. Heeger, professor of physics and of materials at UC, Santa Barbara, will discuss "Gene Sensors: Detection of Specific Targeted Sequences in DNA," in a Director's Distinguished Lecturer Series presentation at 3:30 p.m. Tuesday, Sept. 16, in the Bldg. 123 auditorium.

After giving an overview of the need for high-sensitivity methods to detect specific targeted sequences on DNA, the talk will summarize recent progress in UC Santa Barbara laboratories on two novel approaches: DNA detection using water-soluble conjugated polymers and peptide nucleic acids, and bioelectronic detection of DNA with electrochemical DNA sensors.

Heeger also heads a research group at the University's Center for Polymers and Organic

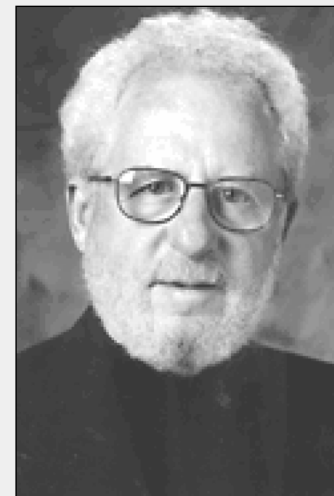
Solids.

He was awarded the Nobel Prize in Chemistry (2000) for his pioneering research in and the co-founding of the field of semiconducting and metallic polymers, in which his research continues. Current interests include studies of biospecific sensors for DNA and proteins.

Director Michael Anastasio invites all employees to attend. The lecture will be broadcast on Lab Channel 2 Thursday, Sept. 25, at 10 a.m., noon, 2, 4 and 8 p.m., and on Friday, Sept. 26, at 4 a.m.

Further information is available at:

- <http://www.nobel.se/chemistry/laureates/2000/heeger-autobio.html>
- <http://www.ipos.ucsb.edu/ajh.html>

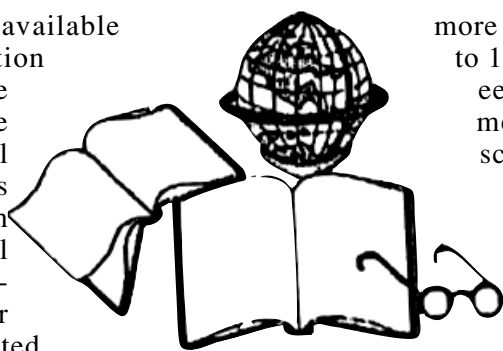


Alan J. Heeger

## LLLWA opens application process for Lab's scholarship program

Applications are now available for the Women's Association (LLLWA) scholarships for the fall 2003 academic year. The program provides financial support to LLNL employees in their pursuit of education for career and personal advancement. These scholarships are designed for employees who have completed academic work within the past two semesters and are planning to continue their academic career in the fall.

The Women's Association has awarded



Life Programs and donations of Lab employees. The awards will be announced in January 2004.

more than \$60,000 in scholarships to 188 male and female employees since 1984. The Department of Energy has called the scholarship program "one of the most effective efforts DOE-wide to improve the status of women." The cost of the scholarships is covered by LLLWA dues plus funds contributed by the Laboratory's Work

Applicants must complete a simple application form, include transcripts, a letter of recommendation from their LLNL supervisor, teacher or educational adviser and participate in a short, informal interview with members of the Scholarship Committee.

To receive a scholarship application, contact Scholarship Program chairperson Joni Schuld at [schuld2@llnl.gov](mailto:schuld2@llnl.gov) or call 2-4168.

The Scholarship Program Website <http://www-r.llnl.gov/lllwa/scholarship.html> also gives more details on eligibility and selection criteria and will soon contain a downloadable 2003 application form. Deadline to submit an application is Oct. 17.

## Lab to celebrate Hispanic Heritage Month with cultural events

Hispanic Heritage month will kick off with a festival Monday, Sept. 15, from 11:30 a.m. to 1 p.m. in the pool and picnic area.

The event, sponsored by the Amigos Unidos Networking Group, will feature entertainment by the Tezkatlipoka Aztec Dancers, food and other festivities.

Lunch plate combinations include carnitas, chile Colorado, or tamale, served with rice, beans, tortillas and a drink for \$6.50, or pre-order tamales for your group through Sept. 11 at \$7.50 for a half dozen or \$14 per dozen. Customers must pick up their tamale orders during the event from 11:30 a.m. to 12:30 p.m. To order lunch tickets or tamales contact Jessica Barraza, 2-6750, Alicia Salmeron, 3-0769, Michael T. Martin, 3-6580, or Irene Ortega, 2-6350.

The month's events will include the Hispanic Speaker series which will feature Simon Salinas, California assembly member, speaking on "Diversity and its Importance" on Oct. 2. Jose Hernandez, the Materials and Processes Branch chief from NASA's Johnson Space

Center, will also be a guest lecturer in the series on Oct. 16, discussing "STS-107 Columbia Accident Investigation and Return to Flight Activities." Both talks will take place at noon in the Bldg. 543 auditorium.

Hispanic Heritage Month will close with another celebration from 11:30 a.m. to 1 p.m., Tuesday, Oct 14, in the pool and picnic area. It is presented by the Amigos Unidos Hispanic Networking Group and sponsored by the Work/Life Programs Office. For more information contact Yahel De La Cruz, 4-3507.

### POLYGRAPH

*Continued from page 1*

Abraham had directed McSarrow to conduct a review of current policy, the NAS report, and the comments submitted for the NOPR. On the basis of that review, McSarrow is now recommending to the Secretary "substantial changes to how we use the polygraph in the context of the Department's counterintelligence program." He also said that "throughout, I was guided by the NAS report, a study of considerable rigor and integrity both in the sense of what it tells us about what we know and don't know about scientific evidence relating to the polygraph, and in its willingness to make clear the limitations under which the study was conducted."

McSarrow went on to say: "if the Secretary accepts my recommendation we will also publish a new proposed rule. Such a proposal will entail

significant consultation within the executive branch. I would anticipate such a proposed rule would be published by the end of this year. In addition to public comment, I would expect the Department to hold a public hearing before finalizing the rule.

"Overall, my recommendation is to narrow the range of information, access to which will trigger mandatory screening as compared to the potential scope of the program under the current rule. The approach I am recommending would have the effect of reducing the number of individuals affected from well in excess of potentially 20,000 under the current rule to approximately 4,500 under this new program.

"I also recommend that it be our policy that the appropriate weapons laboratory director be consulted when the access determination involves a laboratory employee.

"Accordingly, I recommend that we also make clear that it is our policy not to base a denial of

access solely on the results of a polygraph exam."

This would be consistent with the NAS report's recommendation: "We believe that any agency that uses polygraphs as part of a screening process should, in light of the inherent fallibility of the polygraph instrument, use the polygraph results only in conjunction with other information, and only as a trigger for further testing and investigation."

McSarrow credited the NAS report, and the comments he received from the lab directors and others, for having changed his views on this complex issue.

Fienberg welcomed the changes in DOE's position, and explained that his prepared statement did not reflect his reactions to them because he had not seen them until last evening when he received a call from DOE. He gave some of his impromptu reactions during his oral testimony and said he may submit a new statement for the record.



## NEWS YOU CAN USE

# Laboratory publications earn awards



JOSEPH MARTINEZ/IBIS

Winners of the Excellence Award in the Society for Technical Communication's 2002 International competition for the Lab's *Science and Technology Review* include, from left, Pam Smith (IBIS department head), Ann Parker, Carolin Middleton, Arnie Heller, George Kitrinis, Louisa Cardoza, Ray Marazzi and Ken Chinn (IBIS STC organizer).

Innovative Business and Information Services garnered three awards in the Society for Technical Communication (STC) 2002 International Competition.

The STC is the world's largest organization for professionals involved in creating technical publications, art and online materials. IBIS had five entries and won three awards.

The top winner was the *Physics and Advanced Technologies 2001 Annual Report*, which won a Distinguished Award in the annual report category. The contributors to this publication were Gloria Cannon, Ralph Jacobs and John Danielson.

*Science & Technology Review* magazine won an Excellence Award in the magazines category. The contributors for the *Science & Technology Review* were:

Louisa Cardoza, Arnie Heller, Amy Henke, George Kitrinis, Kitty Madison, Ray Marazzi, Carolin Middleton, Ann Parker, Lew Reed, Katie Walter, Dean Wheatcraft, and Gloria Wilt, Tom Isaacs and Kim Budil.

The third winning entry was the *Serving the Nation for Fifty Years—Fifty Years of Accomplishments* publication, which won an Excellence Award in the books category. The contributors to this publication were George Kitrinis, Pam MacGregor and Paul Chrzanowski.

"To get to and then win in the international competition is quite an accomplishment because only the top winners from STC regional competitions are eligible to compete," said Pam Smith, head of IBIS.

## Chemical Society meeting draws 20 Lab researchers with high range of expertise

More than 20 Laboratory researchers will participate in next week's American Chemical Society's 226th national meeting in New York.

Papers and posters range from detection of chemical weapons manufacturing byproducts on the environment and the structure of hydrophobic hydration reactive transport to modeling of cap rock during natural and engineered carbon dioxide sequestration, the characterization of plumes passing over lower Manhattan after the World Trade Center disaster, an overview of ocean carbon storage options and benchmark quantum Monte Carlo calculations as well as others.

Directorates participating include Physics, Energy and Environment, Chemistry and Material Science and Biology and Biotechnology Research.

The meeting, which runs from Sunday through Thursday, will be held at the Javits Convention Center with overflow technical sessions held at the Hilton New York, Sheraton New York, Westin New York, Hotel Pennsylvania, New Yorker, and New York Marriott Marquis hotels.

The American Chemical Society is a self-governed individual membership organization that consists of more than 163,000 members at all degree levels and in all fields of chemistry. The organization provides a broad range of opportunities for peer interaction and career development, regardless of professional or scientific interests.

## Technical Meeting Calendar

Friday  
**5**

### INSTITUTE FOR GEOPHYSICS & PLANETARY PHYSICS

"A Changing View of the Local Interstellar Medium: New Results from the Cosmic Hot Interstellar Plasma Spectrometer(CHIPS)," by Timothy Sasseen, UC Santa Barbara. Noon, Bldg. 319, room 205 (uncleared area). Contacts: Wil van Breugel, 2-7195, or Sharon Taberna, 3-6290.

Tuesday  
**9**

### LC CUSTOMERS MONTHLY MEETING

9:30 a.m. – 11 a.m., Bldg.111, Poseidon Room (cleared area). Contact: Teresa Delpha, 3-7329.

Thursday  
**11**

### ASCI INSTITUTE FOR TERASCALE SIMULATION

"WebBase: Building a Web Warehouse," by Hector Garcia-Molina, Stanford University.

10:30 a.m., Bldg. 123 auditorium (uncleared area). Contacts: Jim McGraw, 2-0541, or Linda Bodtker, 3-0421.

Friday  
**12**

### INSTITUTE FOR GEOPHYSICS & PLANETARY PHYSICS

"The Life Cycle of Silicates," by Francisca Kemper, UCLA. Noon, Bldg. 319, room 205 (uncleared area). Contacts: Wil van Breugel, 2-7195, or Josie Morgado, 3-4188.

Tuesday  
**16**

### ILSA SEMINAR

"Electron acceleration by Langmuir wave-breaking in local ion density gradients," by Nathan John Sircombe, University of Warwick, United Kingdom. 3 p.m., Bldg. 219, room 163 (uncleared area). Contacts: Richard Town, 2-5389, or Josie Morgado, 3-4188.

Wednesday  
**17**

### CHEMISTRY & MATERIALS SCIENCE

"Phonon Dispersion Studies by Inelastic X-ray Scattering," by Michael H. Krisch, European Synchrotron Radiation Facility, France. 10:30 a.m., Bldg. 235, Gold Room (uncleared area). Contacts: Joe Wong, 3-6385, or Rebecca Browning, 2-5500.

Thursday  
**18**

### CHEMISTRY & MATERIALS SCIENCE

"Single-Molecule Magnets and Their Supramolecular Aggregates: A Molecular Approach To Nanomagnetism," by George Christou, University of Florida. 9 a.m., Bldg. 235, Gold Room (uncleared area). Contacts: Art Nelson, 2-6488, or Roberta Marino, 3-7865.

Tuesday  
**23**

### RADIATION DETECTION CENTER

"Biomedical Imaging with Combined X-ray Transmission and Radionuclide Emission Detection Techniques," by Bruce Hasegawa, UCSF Physics Research Lab. 11 a.m., Bldg. 151, room 1207 (uncleared area). Contacts: Ron Wurtz, 3-8504, or Christie Shannon, 3-6683.

### The deadline for the next Technical Meeting Calendar is noon, Wednesday.

Send your input to [tmc-submit@llnl.gov](mailto:tmc-submit@llnl.gov). For information on electronic mail or the newsgroup [llnl.meeting](mailto:llnl.meeting), contact the registrar at [registrar@llnl.gov](mailto:registrar@llnl.gov).

# Summer student puts designs on computer program

By Linda Lucchetti

NEWSLINE STAFF WRITER

Jed Chow of Livermore is a typical 17 year old settling into his senior year at Granada High, getting acquainted with new classes and teachers, and playing music — drums in the school band, and piano at home. But, only a few months ago, Chow was immersed in the development of a Lab computer program that hundreds of visitors will soon be able to view.

Chow spent his summer working in the Computation Directorate, under the supervision of David Fox. He was one of only a few high school students selected for summer employment this year, the majority chosen from colleges and universities.

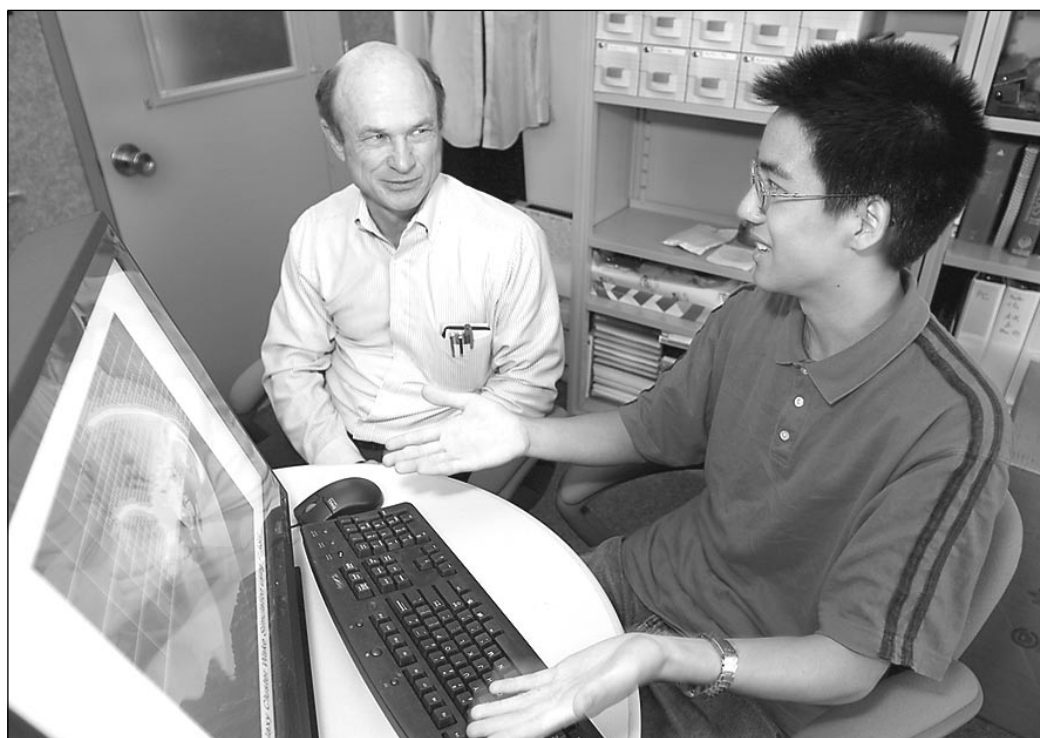
Chow's project was to create an interactive, informative computer program to be displayed on a high-resolution monitor that will be on loan from the Computation Directorate to the Lab's Discovery Center (formerly the Visitors Center).

Bob Howe, an engineer matrixed to Computation as the project lead for ASCI Visualization Deployment, was gathering visual material and text for such a program that could be used in the Discovery Center when Chow began his summer stint in June. A common purpose and interest brought the two together to complete the project.

"I feel very optimistic — someday the future of our country will be in the hands of young people like Jed who possess superb technical skills and an interest in learning, as well as a gift for working with a project team," Howe said after mentoring Chow.

To write the program, Chow first had to tackle the computer language PERL. "This was the hardest part of the project," Chow confessed, adding that he met some challenges mastering the language on his own, within a short span of time.

In addition to learning a computer language, Chow



JACQUELINE MCBRIDE/NEWSLINE

**Bob Howe, project lead for ASCI Visualization Deployment (left), helped high school student Jed Chow (right) develop a program that demonstrates computation capabilities at the Lab. The program will be available to visitors at the Lab's Discovery Center.**

spent some time as a visitor himself, at the Discovery Center, to get a flavor of what visitors see and hear, and to become familiar with key messages conveyed in exhibits.

Chow, with help from Howe, and another mentor Terry Girill, a technical writer matrixed to Computation, designed and developed a computer program to educate visitors about computation capabilities at LLNL. The program also highlights the powerful com-

The Laboratory's Discovery Center is located at the East Gate entrance off Greenville Road and is open to the public Monday through Friday, 1-4 p.m. School tours for 4<sup>th</sup> and 5<sup>th</sup> graders are available by reservation Monday, Wednesday, and Friday from 9-11:30 a.m. For more information call the Public Affairs Office, 2-5815.

puting tools — the high resolution monitor and power walls — used by Lab scientists to depict research data effectively.

"Computation wanted to enrich its Discovery Center display with an interactive exhibit," noted Girill, "and this project fit perfectly with Jed's background in and enthusiasm for computer graphics. The result is something by one student that other student visitors should find interesting."

The high-resolution computer program will be set up during September in the "Science and Technology in the National Interest" zone of the Discovery Center. What visitors and students can learn by viewing the program is the importance of computers in a research setting, as well as the high-tech appeal of the equipment. Visitors will have three choices on the computer menu: a visual program about ASCI; a time line depicting computational accomplishments at the Lab during the past 51 years;

and, several computer simulations or "mini-movies."

Chow hopes to apply to UC Berkeley next fall and major in computer science. "I'm still debating as to which aspect of computations to pursue — hardware side versus software side," he said. He traces his interest in computers back to his first "old" Macintosh and later, in order to play computer games, a PC, which he now endorses stating "PC's are easy to use."

About his time working at the Lab this summer, Chow said, "The Laboratory is a fascinating place. Working here has exceeded my expectations of what I would find in the way of super computing."

Chow is excited that visitors who want to know more about computers and how they are used at the Laboratory on a large scale can view his summer project. "I hope that this program will allow visitors to see things that they wouldn't ordinarily see," he said.

## BRIEFLY

### SCIF fencing work on Mesquite

On Friday the Bldg. 140 SCIF Project fencing subcontractor will be working in the middle of the roadway on Mesquite Way between Avenue A and West Perimeter Drive to set fence posts for the future security gates. The subcontractor's crew will be drilling holes and placing the posts. Traffic controls will be in place for safety and management of traffic circulation in the area during this activity. Please follow all signs, directions and exercise caution in the area for your safety and that of the work crew. If you have any questions contact the Bldg. 140 SCIF Project Manager, Roy Neyer, [neyer1@llnl.gov](mailto:neyer1@llnl.gov), 2-8830.

### Relocation of security post, fences

This weekend the post P-6B security kiosk, currently located on Avenue B just north of Sixth Street, will be relocated south to its new location on Avenue B just north of Third Street. This relocation will improve traffic flow to the Laboratory's southwest quadrant and is necessary to support the upcoming Fifth Street extensions to West Perimeter Drive and West Inner Loop. During this same weekend, the new security fence lines recently installed around Bldg. 261, the 1400 block, Trailer 2580 and Trailers 1677/1632 will also be activated.

Beginning Monday employees working

within these new "limited area islands" will enter the areas through the newly installed electronic booths (double door portals). These access control changes are part of the Fifth Street Road Repair/Reroute project within the Facility Infrastructure and Recapitalization Program.

Removal of fencing which defines the old Limited Area boundaries will occur the week of Sept. 8. Road construction work along Fifth Street is scheduled to begin in October. For questions regarding this work, contact Sheree Swanson, Plant Engineering, 3-5636, or Paul Fink, Safeguards & Security, 3-8073.

### Toastmasters humorous speech contest

The Lab's Microcentury Toastmasters Networking group will hold its annual humorous speech and evaluation contest at noon Tuesday in Bldg. 571, room 2301. Bring your bag lunch for some noontime entertainment. For more information, contact Philip Cameron-Smith, 3-6634.

### Egg roll sales at Vintage Car show

The Chinese American Network Group (CANG) will be selling eggrolls at the Vintage Car show on Thursday, Sept. 18 at 11:30 a.m. in the Bldg. 111 parking lot. If you would like to pre-order, contact Eric Chow @ [chow6@llnl.gov](mailto:chow6@llnl.gov).

### Quarterly blood drive

The Lab's quarterly blood drive will be held in Trailer 4181, Monday through Thursday. Schedule an appointment in advance by going to the

Website (<http://llesa.llnl.gov/>) and click on "blood drive" on the left side of the window. You can also schedule an appointment by calling 1-800-448-3543; use the sponsor code LLNL. Donor eligibility questions may be directed to the American Red Cross at 1-800-448-3543.

### Women's Association schedules social

The Laboratory Women's Association's summer social-membership drive takes place Wednesday at the LLESA Pool/Picnic area, 11:30 a.m.-1 p.m. Luncheon choices are barbecued chicken or portabella mushroom sandwiches, potato salad, fresh fruit, cookies and a drink. If you are attending, make sure to turn in all money to Dianne McGovern ([mcgovern1@llnl.gov](mailto:mcgovern1@llnl.gov)) by the close of business on Tuesday, L-633.

The association is also putting out a call for '04 nominations for president, vice president, secretary and treasurer. Please send nominations to Christine Bell ([bell2@llnl.gov](mailto:bell2@llnl.gov)); voting will be held during the social.

### Operation Welcome Home regalia

Operation Welcome Home still has T-shirts, hats and visors available for \$10 each at the UNCLE Credit Union. Proceeds go to Operation MOM, which sponsored the parade for those who have served in Afghanistan and Iraq.





# CLASSIFIED ADS

See complete classified ad listings at  
<https://www-ais.llnl.gov/newsline/ads/>

**AUTOMOBILES**

1995 - Honda Accord, 4-door LX, light blue, Excellent condition, 45,000 mi., 4-spd automatic, 4 cylinder, AM/FM/tape, \$7,000. 925-447-5860

1987 - Mercedes 560 SL convert. Auto/ac/ps/pb/pw. Both tops. 154K miles. \$7950. 925-447-0596

1992 - Sable GS, White, 3.8 V6, 117K miles, excellent cond., \$2500. 925-855-1297

1965 - Ford Mustang convertible K-code awesome driver in awesome shape rarest Mustang built needs nothing \$28k firm 925-454-1969

1995 - Ford Probe SE, Sport Package, 63k miles, garaged, excellent condition. Great sporty commuter - 35mpg. Must sell \$4500 obo. 925-240-1090

1993 - Dependable, economical, Mercury Topaz, loaded A/C PW PB PDL Stereo Auto, low 61,000 miles, paint fair, all else is excellent, good tires, \$1250 OBO 925-895-5731

1980 - Mazda GLC Hatchback. Greate Little Car. Very Reliable \$500 Firm 925-443-4413

1998 - Dodge RAM 1500 Quad-cab 4x4 Loaded - custom light/leather/Infinity stereo/AC/ PS/PW/lift-kit/tow-pkg/running boards/bedliner/toolbox \$16,500/OBO 925-570-5342

1994 - Plymouth Grand Voyager, white, V6, 130K mi, \$3000 925-820-5807

1969 - Mustang coupe, AT, A/C, PS, Power disc brakes, 351W w/18K, 4bbl Holley, flows, new tranny w/7K, no oil leaks, beautiful paint, \$8500 obo 925-447-5708

1995 - Nissan 240sx. Automatic, Ac, Power Everything, Sun Roof, Alloys, Cruise Control, Abs Brakes, Rear Spoiler, 79k Miles, Runs Great. \$5,500. 209-334-1006

1993 - Honda EX 4-dr, 5-spd. standard transmission, AC, 200k miles, almost-new tires, clean, runs perfectly. \$3000 or best offer takes it. 925-447-1697

2001 - Mercury Sable, LS Premium model, Leather, AM/FM/6CD changer, A/C, sunroof, all power, ABS brakes, 22,000 miles, \$14,500 209-833-1219

1993 - Volvo 940 Wagon - 4 cyl., auto, AC, power steering, brakes, windows, sunroof, leather, alloys, ABS. 106K miles, great condition. \$5,500. 925-846-0482

1999 - VW Beetle, Red, 76K miles, 5-speed, AM/FM cassette stereo, fresh tires, take over payments, cell: 209-471-9499, or after 6 PM: 209-825-9499

1962 - 1962 Cadillac, pearlescent blue-tone white, 4-door, 390cc engine, power windows, low miles, original, \$5000. 209-836-3062

1992 - RS Camero Black W/V6 engine P/W P/L P/B Automatic. Runs great, just passed smog with no problems. Needs paint. \$ 3000 Firm 925-373-8360

2002 - Honda Accord,Auto, 4Cyl., PW,PL,PS,Front and Side air bags,Silver,4Door,18,100mi, clean,\$15,800, bluebook is \$16,900 925-935-7363

2000 - Dodge Stratus SE - MUST SELL!! Excellent cond, warranty, 10-CD changer, new front brakes & tires, AT, pwr d/w/s, AC/heat, 76,000 miles. \$6200 OBO 209-543-6899

1995 - Chevy Tahoe, excel cond, 350ci, V8, A/T, A/C, 4WD, all power, tow pkg, roof rack, premium wheels/new tires, AM/FM radio/CD/cas, 135k, \$10,500 OBO 831-637-1949

1993 - Toyota Tercel DX, 137,000 miles, AT, AC, CD, Alarm, new tires, aluminum wheels, struts and brakes, \$2,500. 209-835-8962

1998 - Explorer 4X4 4WD XLT 4.0SOHC V6, auto, luggage rack, runningboards, tow pkg, many extras, very well maintained, 75.5K mi, \$9900 OBO. 209-599-7955

1989 - Honda Accord 5-speed 4-door new alternator and new tires, very dependable high mileage good condition. \$2,000 925-443-0369

2002 - Toyota Tundra extended cab, seats 6. V8, auto, camper shell, bedliner, tow package, pre-paid maintenance, 21K miles. Gray. Excel. cond. \$21,000. 925-942-3670

1959 - Ford Fairlane 4 Dr. 332 OHV (2 Bbl Carb) Engine and transmission recently rebuilt. \$2000. 925-449-1464

1995 - Toyota 4Runner, auto, leather, cassette/cd changer, 66k miles, excellent cond., original owner, \$9,000 515-451-6484

1994 - Pontiac Bonneville Fully Loaded, 129K miles, clean, Good Tires, new Battery \$2500./BO 209-836-2004

2001 - CHEV SUBURBAN 2500 4x4. Many extras. Low miles. Mod. fuel sys-good gas mileage. Ext. Wty. Sunroof. Towing \$24,500/OBO 209-599-7047

1993 - Ford Explorer, Eddie Bauer, 89k miles, White/Tan, garaged, new Michelin tires, exlnt shape, leather, prem sound, all options except CD. \$5500 OBO. 925-337-1106

1981 - BMW 320i 228k Mi. Fair Cond. \$1000 OBO 925-447-8557

2002 - Mitsubishi Eclipse GT, fully-loaded, leather, charcoal grey, sun roof, 43K miles - \$16,000 209-858-1458

1995 - Lexus SC400 V8 LOADED,Excellent condition,CD changer,New Tires,New Brakes,Dark Green,120K Miles,\$12,000. 209-824-1000

1994 - Ford Escort Station Wagon LX, 131K, AC, CD, 5spd, 4cl, 1,500 obo 209-839-0068

2001 - Infiniti I30. 31,500mi. Brown, leather, moonroof, AT/AC/CD. Always garaged. Excellent condition in and out. \$20,000. 925-735-1787

2001 - Dodge Ram. 1500 Quad Cab 4X4. 5.9L SMPI V8 Magnum. Power win. & doors. AC. New Tires. Alarm. Tow Package. Shell incl. \$18K. 925-997-9507

**AUTOMOBILE ACCESSORIES**

1991 - Honda Accord doughnut spare tire T115/70/D14 \$10 925-447-0678

Four wheels fit for Honda Accord; \$10.00 each. One wheel with tire fit for Honda Accord; \$10.00 Please call after 6 pm 925-449-3295

American Racing Alloy wheels, 16X8, 6-lug, from 1998 Chevy. Set of 4: \$250.00 925-373-5918

Tonneau/bed cover for dakota 4 dr. trucks. Flat black, locks, bike rack. Factory bed liner. \$450 for both. 925-600-7551

**BICYCLES**

23 in Mtn Bike, Schwinn Sierra \$75 925-443-4413

10-speed; Centurion DLX, Silver, good condition, \$25 925-455-5863

Tandem mountain bike for two, excellent condition, \$495 925-377-6537

GIRLS SPECIALIZED MT. BIKE, 18-speed, 20-inch, magenta, new seat/cover. Good condition. Photos available! Paid \$350, \$185 on eBay, asking \$125. 925-963-6152

2 10 Speed bikes. Need a little cleaning up,been in shed for 5 years. 1 Blue, 1 Red. \$50 each obo. Call afer 5pm 925-606-0309

Trek 5200, frame size 56 cm, black, look pedals, shimano ultegra components, excellent condition, price \$1200, 925-443-9419

**BOATS**

14 1/2 ft Alumacraft w/wide beams w/trlr, 5 gal Gas T, Honda 10HP mtr, trol mtr, new batt, dpth finder, twirl bck seat, lf jkts. Call for Price. 209-576-0217

1995 Trophy 2002 Walkaround Cuddy Cabin with trailer. Many extras. Excellent Condition. \$14,000.00 925-778-8283

1989 20ft Raven Cuddy Cabin, 3.0 Mercruiser I/O, fish/ski, New canvas top, CB + Marine radios, Eagle fish finder. \$5500 OBO. 209-662-0640

**CAMERAS**

Sigma 28-200 zoom lens (up to 4x), Nikon mount, \$150 925-377-6537

**ELECTRONIC EQUIPMENT**

ADOBE WEB COLLECTION 3.0 for Mac OS9. Not Lab purchase, no need to call security! Illustrator 9, Photoshop 6, GoLive 5, LiveMotion 1. \$175. 925-455-4666

HAM radio equipment. Too much to list, call for list. Selling due to medical, all very good condition with manuals. 925-449-5543

RCA 25-inch console tv, med. oak finish on cabinet, excellent condition, cable ready, remote included, \$50. 925-447-5623

Pioneer Fh-P4400 Double Din Cd/Tape/Eq Stereo \$200 Obo 925-525-4100

Atari 1040ST computer includes monitor, cpu, mouse, extra floppy drive and lots of software and manuals. \$50 925-443-4413

Therma PLUS Fax Paper rolls (6895 black) for Brother fax machines (ours quit), 6 164-ft rolls, 1-inch core, \$20, call Lyn 925-443-3621

Mitsubishi Big Sreen projection TV (45 inch diagonal). Works well with good sound, about 6 years old. \$300, you move. 925-447-6197

iMAC DV-SE 400 MHz G3/750 13GB 512MB RAM. Keyboard, mouse, dustcover, all software. OS 9.2.2 installed/included. Think back-to-school! \$600. 925-455-4666

Motor, Leeson 1/2 HP, 1725 RPM, 120/240V, 56 frame, 5/8 shaft. \$25. 925-455-5655

**GIVEAWAY**

Stylewriter II printer, Mac compatible, color, accompanying software

included. 925-485-4321

Interior door with frame and casing, 36 inch, split/double door style, painted wood, exc. condition (remodel leftover). 925-606-9575

Reel for solar pool cover. You pick up in Livermore. 925-456-5874

Free for the taking: 20-foot storage container. You haul. 510-886-3322

1.5 yards of clean, new sand. 1 yard of clean dirt fill. 925-454-5214

Firewood. 6ft x 3ft x 2ft stack, cut, split and dried. Hardwood/softwood mix. You haul away. 925-443-6149

Free working washer. The washer is in good shape and works fine. You pick up in Pleasanton. 925-200-4241

Sofa, solid tan, fabric, modern style, good condition. u-pickup. Leave message 925-754-8745

**HOUSEHOLD**

Oak Computer Desk with removable hutch in excellent condition. Light colored wood. \$350 or best offer. 925-373-9439

WATERBED for sale. Super Single, New mattress, Headboard (runs along the length of bed), Dark solid wood, Heater, Good condition. MAKE OFFER => 209-839-1205

Leather sofa sleep & reclining love seat, Lane brand, burgundy, good condition, \$500 925-895-5731

Lavender dinnerware, 4 place settings, 15-oz mugs, from Winterthur catalog, gorgeous color, new in box, \$40, 925-443-3621

Antique oak 48-inch round pedestal table with 6 oak chairs. \$1,000. or best offer 925-846-3091

Small dinette (4 chairs) \$75.00 Microwave oven \$15 Eureka Vacuum cleaner \$10 Lots of other household items \$.50 to \$3 925-606-1352

Kitchen table with 4 chairs. 48 x 36. \$150. Two nightstands with two drawer. Maple finish. \$80. 2 yr old. Perfect condition. 925-456-3383

2-DRAWER NIGHTSTANDS set/2, good condition, photos/dimensions available. \$50 for both. 925-455-4666

Tupperware for sale, or set up sale as fundraiser = great profits! 925-516-2728

Cosco Car Seat hardly used-Bought for the 60lb requirement \$25, Antique Maple Phone Table- good for small areas \$30. 925-606-0309

Queen size oak headboard, all in one, lights overhead, mirrors, night stands, and cabinets. Made by The Woodworks. Great condition! \$500 209-836-3062

Cosco white toddler sleigh bed with mattress \$35 Magic Chef refrigerator with icemaker \$100 209-824-2177

Black and Decker hedge trimmer, 16 inch cut, used once \$20 925-447-2392

Kirby G5 vacuum cleaner, with attachments, carpet shampooer. Includes 9 bags. \$200. 925-443-0766

Simmons Beautyrest twin bed with frame. Very nice condition. \$100 925-455-4484

Baby swing, 6 speeds/music-like new \$50, Take-n-carry swing \$15, Cradle w/bedding, light wood \$60, Graco-Stroller \$40, Exer-saucer \$20. 925-829-5126

Retirement sale - Lots of machinist tools: calipers, micrometers, vises, cutting tools, some new. Available to see on 9/20 & 9/21. 925-447-6676

Captains bed, double dresser, 2 single dressers, 2 bookcases, mirror, chair. Excellent condition. \$425 510-635-6317

Couch, EKORNES,Danish brown leather, stuffed, on Teak frame, Dimensions(inches): 79x33x28 (\$150);Director Chair, White Naugehide on chrome frame(\$50) 925-443-1969

light fixtures, 2 bathroom light bars, 6 globes ea, brass and oak, excellent condition, \$15 each 925-443-5324

Med oak table green legs 4 chairs \$75.00, large area rug (wine, greens, tan)great condition \$50.00, Large Picture-Country Road \$40.00 925-846-2794

Bedroom set, black and silver, headboard fits full to king, 2 night stands, dresser with mirror. Like new. \$350 925-443-9080

**MISCELLANEOUS**

Toddler girls clothes szs. 18 mo and 2T, beautiful fall/winter outfits, \$5-\$10. Boys and girls winter coats, szs. 2T and 3T, \$10. Excel. cond.! 925-454-0877

MTD 21 inch rear bag lawn mower. Excellent condition. \$75 obo. 925-447-8845

Air Compressor- 4 Gallon, 125 PSI Husky, \$149 at Home Depot, yours for just \$65 209-836-3481

Porta court, excellent condition, \$45 925-443-4413

Two-family Estate/Garage sale. Saturday September 6th only, 8am-2pm. 493 and 546 Tyler Ave., Livermore; near Jackson School. 925-455-4846

Used 12 ft 3-legged wooden picking or pruning ladders in good condition. \$20.00 each. 209-892-6993

Baby/toddler stuff - potty chairs, booster seat, umbrella stroller, bed rail, safety gate. \$8 each. 925-454-0877

Honeymooner Collectors Plates, Hamilton Collection, 3rd & 6th in series, w/oak frames for hanging & certificates of authenticity, \$25.00/each. 925-200-7138

Reel for swimming pool cover. Adjustable for 12ft to 20ft pool width - brand new and still in box. Paid \$150; asking \$75. 925-634-7513

Executive Fan Desk. Light desert oak. 29x59x29. \$50. Fabric executive chair. Gray. \$40. 2 yr old. Excellent condition. 925-456-3383

49er vs Chicago Bears Tickets(4) Sun Sept.7 1:15 Kick off the season with Home opener UR sec 11 End zone face value \$58ea 209-499-3793

Planer, Rockwell RC-33 13-inch industrial, 2 HP, with HTC roller stand xlnt cond. \$750. 925-455-5655

Hot Tub Cover 70 inches by 84 inches, green,square. \$50. 925-443-3091

5 Giants/Padres tickets, Wed. 9/17 @ 7:15PM. \$100/bo. 209-403-4942

Powermate 1500W generator with 4 stroke Kawasaki engine. \$200. 925-455-8609

Solid Oak Office desk 74 inches long 40 inches wide with credenza.

**Due to space limitations, *Newsline* may withhold ads that have already run. They will still appear on the Web.**

DIRECTOR’S OFFICE

Continued from page 1

of September 11, have been marshaled under the Homeland Security Organization, led by Wayne Shotts.

Building on core missions and capabilities developed over the Lab’s 50-year history, this new organization is focusing Laboratory efforts to meet homeland security needs in nuclear and radiological countermeasures, chemical and biological countermeasures, integrated systems analysis, information analysis and infrastructure protection, border and transportation security, and emergency preparedness and response. These activities draw on the full breadth of the Lab’s disciplines.

We are working with the Department of Homeland Security and other national labs to develop an integrated set of capabilities and systems to secure the homeland against terrorist attack.

We are leveraging our proximity to Silicon Valley, Bay Area biotech, research institutions, major universities, international airports and seaports, and rail and mass transit systems to get new

and better tools into the hands of first responders and others on the front lines of the war against terrorism.

Over the past two years, the Laboratory and its partners have contributed numerous technologies to homeland security, including portable radiation detection instruments, handheld and autonomous biodetectors, and the biodefense system used at the Winter Olympics in Salt Lake City and deployed at various high-visibility national events since then.

Other initiatives:

- The Radiation Detection Center to further the development of the advanced detection technologies needed to detect smuggled nuclear materials.
- Work by the Joint Genome Institute (JGI) to sequence the genomes of pathogens of concern.
- A program linking the National Atmospheric Release Advisory Center to cities and regional governments to provide them with atmospheric plume prediction capabilities for radiological, biological, chemical and other hazardous materials.
- An experimental facility to evaluate the capabilities of commercial cargo container inspection equipment and to develop new inspection technologies and methods.

tion equipment and to develop new inspection technologies and methods.

- New simulation tools to assist emergency planners and first responders in modeling buildings and facilities, identifying vulnerabilities, and evaluating defensive measures and response strategies.
- Steps to build a new secure biology laboratory that will allow researchers to study top-priority pathogens and develop improved detection methods.

The Laboratory is also taking action to enhance the physical security of its facilities and security awareness of its employees. Most noticeable is the newly limited access to the East Avenue corridor between our Lab and Sandia.

September 11 galvanized the nation in its response to new threats and has changed the urgency in our national security missions. The painful memories of the attacks on the World Trade Center and the Pentagon continue to fuel our determination to do everything possible to help make sure this never happens again. Contributing to this collective effort is the best tribute we can pay to those who perished that day.

Reasonable.Good condition. 510-793-9135

SF Giants Tickets for Sat. 9/27 7:15 P.M. Game vs LA Dodgers. 2 tickets Sec.131 Row 23. Sold to best offer. 925-200-4241

Pool cover with reel was \$350.00 asking \$150.00. Adjustable from 14ft for 20ft width, fits pool up to 16ft X 36ft. 925-443-3126

Computer desk, oak finish, 2 file drawers & pull-out keyboard tray (53x59x24) \$125. Ice cream parlor table w/4 chairs \$40 OBO. 209-545-5075

Baby swing, 6 speeds/music like new \$50, Take-n-carry swing \$15, Cradle w/bedding, light brown wood \$60, Exer-saucer \$20 925-829-5126

MOTORCYCLES

HONDA CRF-230 dirt bike, 2003, mint-C, less than 200 miles, save \$600 off dealer costs, \$3,000, aft 6pm 209-832-2056

1985 - KTM 500, Dirtbike \$950 in recent receipts. Includes all riding gear and extras. Runs great and looks new. 209-833-3325

1972 - Bultaco garage sale! Two M-85 Alpina projects. Two engines, frames, swing arms, forks, bodywork and green stickers. \$500 for all. 925-600-1817

1998 - KTM 65SX upgraded rear shock, new chain and sprockets, fresh top end, FMF pipe and silenser. \$1600 209-834-1374

2003 - YZ-125 Pro Taper Bars,work connection frame, jetted, excel rims with fly stand. Only 5 rides. \$4500 925-447-0546

2003 - YZ-250 Renthal Bars, RMF Fatty Pipe Work Connection Frame, Jetted, Excel Rims, w/Stand - Beautiful Bike - \$5300 925-447-0546

MUSIC INSTRUMENTS

Student violin with new bow. Great for elementary music program. Good condition. \$200 925-447-1281

Piano-upright Kohler & Campbell, oak finish in excellent condition. \$1,200. or best offer 925-846-3091

Emerson piano, very good condition, circa 1920s. \$350 925-371-6997

1961 Gulbransen Spinnett piano

with bench - oak \$700 very good condition; needs tuning. Looking for new home. 831-637-1949

Ludwig Super Classic 5-piece drum set. Vintage 1966 gold-sparkle. Chrome snare. 5 cymbals. Excellent++ condition. \$800. 925-634-9976

PETS & SUPPLIES

Western Pleasure custom show saddle. One of the last saddles made by Rowell Saddlery. Berry pattern silver with matching breast plate. \$2,000/B.O. 925-449-1128

Dwarf Hamsters, very cute & friendly, 4 weeks old, FREE! 209-833-9141

Needs a loving home, Holly is an 11yr old Dalmatian her owners moved away and could not take her. Please call 209-833-0534

Moving, free to good home. Four house cats, 3 female (spayed) and 1 male (neutered). 2 dogs female border collie mix. 925-292-8948

Pixie - Bob kittens, one male, one female. first shots, box trained, good colors, bobed tails. Very athletic, good with children. 209-835-4281

KITTENS- 2 orange males,1 calico female 8wks. Spayed and shots. Donation to rescue center required. 510-339-7104

Contra Costa Horsemens Assoc. is having another playday! High point buckles, large raffle, bbq, live music, and dancing. Call for details! 925-381-2359

Rottweiler/Shephard Mix Puppies, 8 weeks old. Very cute. Please take one home! 209-607-9529

RECREATION EQUIPMENT

Weider Pro 9930 home gym exercise set. never used pd \$400 asking \$225 209-832-1105

Pitching Machine, ATEC Rookie, Battery operated, battery w/charger, leg extensions and 24 dimpled balls w/bag, excellent condition. \$1,000. 925-443-0362

Universal weight set, attachments offer full body work-out, in good condition \$85 925-552-6684

2 wet suits (shorties). Mens medium/small. Rarely used. Like new condition. ONeill \$75. Seaquest \$55. 925-634-9976

SCUBA Gear. Regulators with

octos, computers, BC, DUI Dry Suit with divewear. All in great shape at a great price. Call for more info. 925-454-9253

RIDESHARING

Express your commute, call 2-RIDE for more information or visit <http://www-r.llnl.gov/tsmp>.

MANTECA - Rider/Driver needed. Flexible drive schedule. Work hours 7:30 AM to 4:00 PM. 209-823-5593, ext. 3-8539

Fremont - Seeking female rider/driver or a van pool. Work Hours 8-5 or 9-6. Call 510-651-3678, ext. 3-9087

SHARED HOUSING

Dublin - Master bedroom/bath unfurnished w/walkin closet. \$725/month plus 1/4 utilities, non-smoker, female, no pets. 828-1014

Livermore - furnished room for rent. Clean/quiet. No pets/no smoking. \$550.00/month. Share utilities 1/3. Long term preferred. Mature adult. 925-449-1128

SERVICES

Oat Hay and Forage Mix Hay, Clean and Certified, can go into National Forests. In the stack \$8 per bale. Can deliver locally, Livermore 925-449-5640

Flea Market -Asbury United Methodist Church 4743 East Ave. Sept.20 9am-2pm on Booth spaces are still available. Cost \$15.00 925-449-5308

Entertainment Books 2004 \$30 ea for Greater Bay Area. Proceeds for Livermore American Indian Ctr. 925-709-1794

Valley Springs Area: FIREWOOD, clean oak, \$225 a cord. Deliverly available. (209-772-9470) 209-772-3141

Piano Tuning. Discount for LLNL employees. 925-371-6997

All aspects of construction, consultation, and/or inspection services available. 209-836-3062

Heating and air conditioning installation and repair. Licensed installer. 925-828-6190

TRUCKS & TRAILERS

1978 Field&Stream Motorhome,

Excellent Condition, 27K miles, fully self contained, 4k Generator, New Tires ,Air, Cruse & more. \$9,500 must see 925-600-1520

1976 Winnebago Brave, Dodge 318, 21 FT, Class A, Generator, Headers, Tow Pkg., Sleeps 6, Dual Gas Tanks, Low miles, Runs Great! \$4995 or BO. 209-836-3062

1998 - Dodge RAM 1500 Quad-cab 4x4 Loaded - custom light/leather/Infinity stereo/ AC/PS/PW/lift-kit/tow-pkg/running boards/bedliner/toolbox \$16,500/OBO. 925-570-5342

1980 - GMC C2500, camper special, 90K original miles, 454 c.i., runs strong, great work truck, good camper or towing, \$3,000/OBO 925-447-4161

1997 - Chevrolet, S10 pickup, LS, ExtCab, 3dr, black, V6, AT, AC, PL, YakRack, 10 CD, 52K mi, \$8999 OBO. 209-483-7456

2002 - Chev Silverado 1500, Red Sport Side, 5sp Man, 4.8 V8, 12K miles, Excellent condition, Very good looking! \$13,500. 925-455-5115

1988 - Ford F-250HD 4x4 7.5L V8 5 speed manual 126K miles. \$3500. OBO Smog cert good thru 9-27-03 925-373-9638

1999 - Ford Explorer Eddiebauer,Low milage,Excellent Cond.power everything. \$16,000 obo 925-373-1944

1993 - Ford Ranger - Ext Cab, tow package, good, strong work truck. 3500 or BO 209-832-5944

1973 - Prowler, 22 ft. New Tires,good Condition Clean- Must See .. 925-447-7150

1988 - Ford F150 Econoline Van,AC,PS,PW,PD,CC,TV,VCR, AM FM, Siler & Black, 2,500 OBO 209-839-0068

VACATION RENTALS

Mountain cabins are great in fall. Hiking, fishing, lakes, creeks. 4 bedr.2 bath near Arnold. Fully equipped kitchen. 925-245-1114

Soooo cute beach cottage in Santa Cruz. 4 short blocks to ocean. 2 bedr. 2 bath, fully equipped kitchen, spa. 925-245-1114

Maui, HI - Kahana Reef oceanfront 1BR/1BA condominium. Beautiful two-island view, oceanside pool, and BBQs. Low LLNL rates for year-round reservations. 925-449-0761

Soda Springs/Donner Summit, Classic A frame, 2BR/1BA+Loft, sleeps 8, conv to biking, hiking, everything \$200 wknd,\$500/ week call for availability 209-836-3481

Time share available. Cabo San Lucas Pueblo Bonito. Call for rental or price. 510-782-2349

SOUTH LAKE TAHOE - 3 Bedroom 2 bath Chalet, remodeled ,nicely furnished,All amenities, Park w/ Lake, tennis etc.Great for family vacation! 209-599-4644

Gualala, CA - Coral Cove, Stunning Ocean Views, share our Quiet getaway, just north of Sea Ranch. 10% discount to LLNLers. 925-606-1845

WANTED

WANTED:Double bassist for low-pressure bluegrass/acoustic band. 925-600-1817

WANTED: Small, used outboard motor at reasonable price, 7.5 to 15hp. 925-606-5982

R/C Airplane, electronics, preferably ready-to-run. Interested in anything however. 209-839-1205

Wanted - 3 tickets to any Giants home game. 209-832-3382

Bike rack for hatchback 925-443-4413

Play structure for active 1 year old. Little Tykes preferably. 209-334-1006

Wanted: Real-not toy- slot machine in good condition. 925-829-2786

I am interested in a vacation rental in Tahoe, preferably South Shore. 510-881-5033

Babysitter: Someone who enjoys children and would like to do occasional babysitting for a 4 year old boy. 925-306-9741

Tyke or Step 2 play house for toddler. 209-823-1895

Xbox with halo, controlers would be nice too if possible. 925-449-1318

Looking for a large chest or upright freezer for a good price. Will haul. 925-980-1895

Services and merchandise listed in Newsline are not guaranteed. It is up to the buyer to scrutinize services purchased.



## CGSR

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and Saclay, France.

"This has been one of the most international projects we have organized," said Eileen Vergino of CGSR, adding that more than 200 people participated in the workshops.

Delivering the keynote addresses at the Washington workshop's opening night Wednesday were Jacques Bouchard of France's Commissariat à l'Énergie Atomique (CEA) and Atsuyuki Suzuki, a leading Japanese nuclear engineer who has served as an advisor to Japan's Atomic Energy Commission and Nuclear Safety Commission as well as the International Atomic Energy Commission. Ron Lehman, director of CGSR, presided over the meeting.

The subgroups that worked on the project's component issues rolled out drafts of their final reports earlier Thursday. These reports will serve as the discussion topics of a conference to be held at the Laboratory on Nov. 13-14.

Eisenhower delivered his "Atoms for Peace" address to the General Assembly of the United Nations in December 1953 after returning from a summit with the United Kingdom and France. As the Cold War was intensifying, Eisenhower offered a bold proposal. "If

the fearful trend of atomic military build-up can be reversed, this greatest of destructive forces can be developed into a great boon for the benefit of all mankind."

He proposed to help non-nuclear weapons states develop the civilian benefits of nuclear technology, including energy, medicine and agriculture. For their part, nuclear weapons states would eventually eliminate their weapons.

While previous CGSR workshops have also included experts from around the world, holding sessions in Japan and France gave the discussions an "inherently international flavor," according to Vergino.

"The discussion of cross-cutting issues in France was especially lively with the participation of the 'next generation of nuclear specialists,'" Vergino said. "We've engaged the young generation network in these discussions both in Japan and France."



**CGSR Director Ron Lehman making a presentation at a workshop in Saclay, France earlier this year.**

Drafts of the full reports will be available from CGSR in October. A final report will be published in November. Check the CGSR Website: <http://cgsr.llnl.gov>.

The November symposium will include a one-day historical retrospective followed by a one-day forward-looking exploration, including presentation of the final project results. "We really want Laboratory people to participate in the November conference," Vergino said.

Also contributing to the workshops were former Director Mike May, John Taylor (Electric Power Research Institute), Bill Schneider (Defense Science Board), Bob Schock (who organized the project) Neil Joeck, Carl Poppe, Tom Isaacs, Mort Mendelsohn, Craig Smith, Jor-Shan Choi and Dana Christensen.

Look for additional information about the November seminar in *Newsline* and *NewsOnLine*.

## EARTHQUAKES

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occurs.

The three-year project is providing ground-truth information on explosions conducted at principal mines within 500 kilometers of the ARCES seismic station. The Lab is partnering with NORSAR — a non-profit Norwegian research organization — and the Kola Regional Seismological Center in Russia to characterize the range of mining going on in northwest Russia and Sweden. These researchers hope to be able to determine from the signals observed by seismic stations whether the observed events are mine blasts, and whether these blasts occur above ground or underground.

Though there is some minor natural seismicity in the area caused by a rebound of the earth's crust following the melting of the continental ice sheet at the end of the Ice Age, David Harris, LLNL's principal investigator on the project, said the vast majority of observed events are explosions at the plethora of mines

in the area. The diverse types of mining explosions in the area make it a natural laboratory for studying commercial explosions.

"The purpose is to observe how variable mining explosions are compared to nuclear explosions or earthquakes," Harris said. "The greater the variability, the more difficult it will be to devise effect screens for normal blasting activity."

To date, the project has collected ground truth information on 1,118 explosions in the Kola Peninsula and waveform data for about 700 of those events. The mines are in Khibiny Massif, Olenogorsk, Zaployamy and Kovdor regions of arctic Russia. Routine industrial blasts constitute a large proportion of events detected by monitoring stations close to major mining districts, but Harris said it's often a problem to determine which individual mines are responsible for the majority of the events.

"Ultimately, we'd like to remove the mine explosions from consideration so we can calibrate the instruments to detect earthquakes or other kinds of ground motion," Harris said.

This year, the LLNL team that includes Harris, Teresa Hauk, Don Rock and Pat Lewis, collected ground information from September 2001 to June 2003 for a large number of explosions in a diverse set of mines in the Kola Peninsula and assembled a database of waveform observations of these events from principal monitoring stations of the region.

In addition, Lab field engineers Rock and Lewis and NORSAR personnel set up additional temporary stations in the region to fill range gaps in the observations. The temporary stations will stay in place until summer 2004.

Preliminary studies of the data from the ARCES station show significant differences in the character of seismic signals from different types of mining explosions. In particular, compact underground explosions and surface ripple-fired explosions produce signals with very different characteristics. The compact underground explosions are small shots (typically in the 2-5-ton range) conducted with only a few delays while the surface shots are much larger, ranging up to several hundred tons with many delays.

## FOCUS GROUP

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next five years.

Harry Radousky, URP deputy director said: "The meeting was the first of its kind. We hope it served as a kickoff for future interactions with UC Davis."

The Laboratory currently maintains joint projects on a large scale with UC Davis, such as the Integrated Cancer Center and the Center for Biophotonic Science and Technologies (CBST), both housed at the UC Davis Medical Center in Sacramento. Radousky added, "Our intent is to bring the Lab and UC Davis collaborations to the next level."

The one-day session began with overviews from both groups presented by the Laboratory's acting Deputy Director for Science & Technology Hal Gra-

boske and by UC Davis Vice Chancellor for Research Barry Klein. The presentations were followed by a panel discussion moderated by Ann Orel, UC Davis Department of Applied Science chair, on strategic goals and objectives which included URP Director Laura Gilliom, Radousky, and UC Davis representatives Klein, Andre Lauchli, and Bernd Hamann. Harry Vantine, of the Laboratory's Nonproliferation, Arms Control and International Security (NAI) Directorate and Homeland Security Organization presented a talk during lunch on homeland security.

During the afternoon, visitors broke into focus groups with Laboratory researchers to discuss potential collaborations in bioscience, physical science, engineering, computer science, geo-science, atmospheric and environmental sciences. Participants also had a chance to visit the Center for Accelerator Mass Spec-

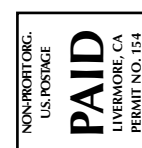
troscopy (CAMS), one of the UC institutes located at LLNL. In addition, guests toured the new Edward Teller Education Center (ETEC), a UC collaboration that will focus on enhancing the quality of K-12 education in science and technology, as well as community college level.

Feedback from the more than 100 Laboratory and UC Davis participants was positive, resulting in several actions items: establishing a future seminar series; continuing to improve communication between the two institutions; and heightening awareness of UC programs, fellowships and student opportunities.



JACQUELINE MCBRIDE/NEWSLINE

UC and LLNL representatives met to discuss future collaborations. A panel discussion on strategic goals and objectives was conducted. Panel members included from left to right: Harry Radousky, URP deputy director; Bernd Hamann, UC Davis computer science professor; Barry Klein, UC Davis vice chancellor for research; Laura Gilliom, URP director; Andre Lauchli, UC Davis associate vice chancellor for research; and Ann Orel, UC Davis Department of Applied Science chair.



**Newsline**  
**UC-LLNL**  
**PO Box 808, L-797**  
**Livermore, CA 94551-0808**